

Ship Jan 27, 2017

Work Order ID 154724

154724

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Monday, December 19, 2016 5:01:30 PM

Item ID: D4635-143 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Aft Ceiling Replacement Panel Assembly, LH
Start Date: 1/12/2017 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 1/18/2017 Req'd Qty: 1.00 *1* Customer:
Reference: DEC 20 2016

Approvals: Process Plan: DAS 21 Date: 12-21-16 Tooling: Date: Run Start *NR1*
QC: 9-89 Date: 9-89 SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4635	F

100

0.00

100

HandThermo

Memo

0.12

Hand Finishing Thermoforming

Pick Kit

1 JAN 12 2017 DAS 6 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110 Small Fab	Memo Assemble as per Dwg D4635-143 Bond foam core to inside of panel 3M Scotch Weld 1300 Batch: <u>13SS27</u>	0.17				<u>27</u> DAS 9-89			
Small Fab	1- Scuff bonding surface to eliminate in-perfections and increase bonding and clean with wash& wipe 2- Locate and glue down Channel Assy, angles, brackets, and mounting pads using 3M Plastic welder II.(see note 8) Batch # <u>13S436</u> Expiry Date <u>Feb 2017</u> 3- Apply labels as per Dwg. and seal with 3M 3950 edge sealer(see note 9) Batch: <u>13S435</u>							JAN 19 2017	
120	QC5- Inspect part completeness to step on W/O	0.00							
120 QC	Memo	0.00							
Quality Control									
						</			

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: _____	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

Smb
1/11/13

DAS
21
9-89

JAN 24 2017

DAS
21
9-89

JAN 24 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY									
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
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Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Picklist Print

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Page 1

Work Order ID: 154724

154724

Parent Item: D4635-143

D4635-143

Parent Item Name: Aft Ceiling Replacement Panel Assembly, LH

Start Date: 1/12/2017

Required Date: 1/18/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A 12/08/09 New Issue DL
12/11/08 Doc Release DL
Update 13/07/09 DL verf:DD
13/12/09 DL
Ipp Rev. E Dwg Update 14/01/09 DL
Dwg. Update 15/01/27 DL

IPP Rev B
IPP Rev. C Dwg.
IPP Rev D Dwg Update

IPP Rev. F

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4635-3		Manufactured	No			100	Each	0.0000	1	1			DAS 27 9-89
D4635-3 Aft Ceiling Panel, LH									**	BK54707			
D4669-1		Manufactured	No			100	Each	20.0000	1	1			DAS JAN 12 2017 6 9-89
D4669-1 Bracket									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MF004				20					
					125017			20					
D4669-3		Manufactured	No			100	Each	42.0000	1	1			DAS JAN 12 2017 6 9-89
D4669-3 Bracket									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MF004				42					
					117668			27					
					117690			15					
D4695-3		Manufactured	No			100	Each	3.0000	1	1			DAS JAN 12 2017 6 9-89 S/D
D4695-3 Channel									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST446				3					
					121329			3					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Picklist Print

Monday, December 19, 2016 5:01:35 PM

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Work Order ID: 154724

154724

Parent Item: D4635-143

D4635-143

Parent Item Name: Aft Ceiling Replacement Panel Assembly, LH

Start Date: 1/12/2017

Required Date: 1/18/2017

Start Qty: 1.00

Required Qty: 1.00

D4732-1

Manufactured No

100

Each

10.0000

1

1

D4732-1

Label

JAN 12 2017

DAS
6
2.99

Location

Loc Qty

Loc Code

MF005

10

120060

1

123200

9

D4732-13

Manufactured No

100

Each

10.0000

1

1

D4732-13

Label

JAN 12 2017

DAS
6
2.99

Location

Loc Qty

Loc Code

MF005

10

123206

10

D4732-37

Manufactured No

100

Each

9.0000

1

1

D4732-37

Label

JAN 12 2017

DAS
6
2.99

Location

Loc Qty

Loc Code

MF005

9

123218

9

D5022-3

Manufactured No

100

Each

5.0000

1

1

D5022-3

Foam, Side Panel, Aft

JAN 12 2017

DAS
6
2.99

Location

Loc Qty

Loc Code

MF010

5

123919

3

126185

2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

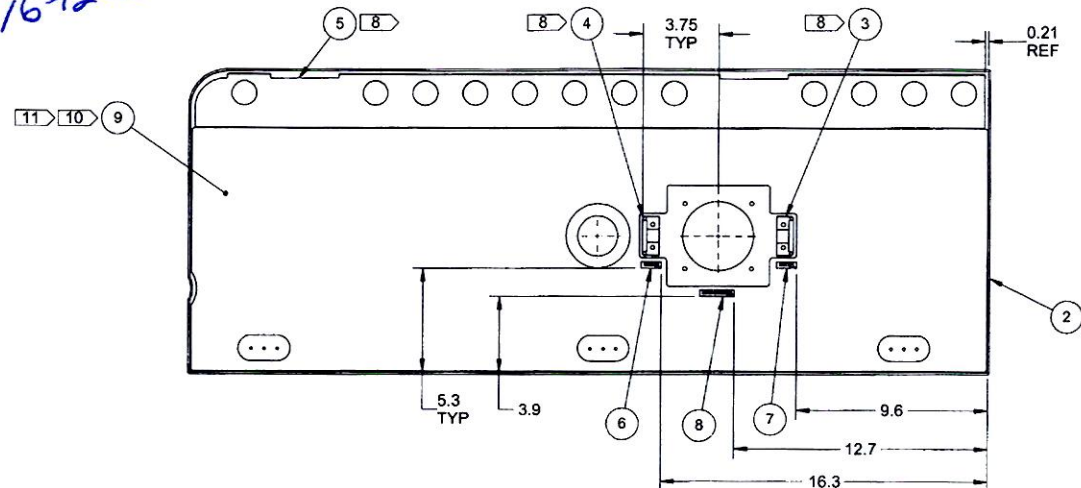
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

8 7 6 5 4 3 2 1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154724ML5
16-12-20

ITEM	QTY	P/N	DESCRIPTION
1	X	D4635-143	LH, AFT CEILING REPLACEMENT PANEL ASSY
2	1	D4635-3	LH, AFT CEILING PANEL
3	1	D4669-1	BRACKET
4	1	D4669-3	BRACKET
5	1	D4695-3	CHANNEL
6	1	D4732-1	LABEL
7	1	D4732-13	LABEL
8	1	D4732-37	LABEL
9	1	D5022-3	FOAM, SIDE PANEL, AFT. LH



D4635-143 LH, AFT CEILING REPLACEMENT PANEL ASSY

RELEASED
2015 JAN 26 *4p*

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) APPLY A BEAD (0.20 TO 0.30 WIDE) OF DEVCON PLASTIC WELDER II (0.25 INSIDE OF BOTH EDGES OF PART) TO BOND D4669-1/-3 & D4695-3. WAIT FOR 2 TO 4 HOURS FOR FUNCTIONAL CURE
 - 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
 - 10) APPLY AN EVEN COAT OF 3M SCOTCH WELD 1300L CONTACT ADHESIVE TO BOND D5022-3 FOAM CORE TO INSIDE OF PANEL
 - 11) CENTER D5022-3 FOAM ON D4635-3

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. F
MFG. APPR.	DL	D4635	SHEET 11 OF 18
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OUTBOARD CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1